

# DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 80615 ORG ID FL21WQSP LATITUDE \_\_\_\_\_  
 COUNTY JEFFERSON STORET # 22040022 22030061 LONGITUDE \_\_\_\_\_  
 DATE 12-12-12 12.18.19 TIME 1330 SAMPLING AGENCY FDEP  
 SITE NAME WILLOW CREEK WYLD CREEK RECEIVING BODY OF WATER WACUSSA RIVER  
 FIELD ID/NAME WYLD CREEK

## RIPARIAN ZONE / STREAM FEATURES

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |                                                                                                                                                                                                              |  |  |  |                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PREDOMINANT LAND-USE IN WATERSHED</b> (specify relative percent in each category):<br>Forest/Natural <input checked="" type="checkbox"/> Silviculture <input checked="" type="checkbox"/> Field/Pasture <input checked="" type="checkbox"/> Agricultural <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industry <input type="checkbox"/> Other (Specify) <input type="checkbox"/> |  |  |  |                                                                                                                                                                                                              |  |  |  | <b>Landscape Development Intensity Index (LDI)</b><br><u>1.4</u>                                                                                                                             |
| Local Watershed Erosion (select one): <input checked="" type="checkbox"/> None <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy<br>Local Watershed NPS Pollution: <input checked="" type="checkbox"/> No evidence <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy                                                                                             |  |  |  |                                                                                                                                                                                                              |  |  |  | <b>Typical Width (m) Depth (m)/Velocity (m/sec) Transect</b><br><u>10</u> m wide<br><u>0.25</u> m/s <u>0.27</u> m/s <u>0.25</u> m/s<br><u>0.3</u> m deep <u>0.4</u> m deep <u>0.3</u> m deep |
| <b>Width of Riparian Vegetation (m) on Each Buffer Side</b><br>Left Bank: <u>718m</u> Right Bank: <u>718m</u>                                                                                                                                                                                                                                                                                                                                                  |  |  |  | <b>Hydrologic Modification Score</b> (per FT 3101)<br><u>1-2</u>                                                                                                                                             |  |  |  |                                                                                                                                                                                              |
| <b>High Water Mark:</b> <u>2.0</u> + <u>0.4</u> = <u>2.4</u><br>(m) (above present water level) (present depth) (above bed)                                                                                                                                                                                                                                                                                                                                    |  |  |  | <b>Artificially Impounded</b><br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                         |  |  |  |                                                                                                                                                                                              |
| <b>Artificially</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Mostly recovered, more sinuous<br><b>Channelized:</b> <input type="checkbox"/> Some recovery <input type="checkbox"/> Recent, severe                                                                                                                                                                                                                                       |  |  |  | <b>Canopy Cover %</b> <input type="checkbox"/> Open <input type="checkbox"/> Lightly Shaded (11-45%)<br><input type="checkbox"/> Heavily Shaded <input checked="" type="checkbox"/> Moderate Shaded (46-80%) |  |  |  |                                                                                                                                                                                              |

## SEDIMENT / SUBSTRATE

| <b>Sediment Oils</b><br><input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight<br><input type="checkbox"/> Moderate <input type="checkbox"/> Profuse                                                                                                                                                                                                                                                                                                                                                                                                          |            |             | <b>Sediment Odors</b><br><input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum<br><input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic<br><input type="checkbox"/> Other (Specify): _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |              | <b>Smothering of Substrates</b><br>Sand Smothering: None <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Severe <input type="checkbox"/><br>Silt Smothering: None <input type="checkbox"/> Slight <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Severe <input type="checkbox"/><br>Algae Smothering: None <input checked="" type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe <input type="checkbox"/> |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------|--|-----------|------------|---------|-------------|--------------|-----------------|----------------|------------|------|------------|-------------|-------------|-------------|-------------|-----------|--|------------|------|--|--|--|--|--|--|--|--|---------|--|--|--|--|--|--|--|--|
| <b>SUBSTRATE TYPE</b><br>Assessment Tool: <input checked="" type="checkbox"/> SCI <input checked="" type="checkbox"/> RPS <input type="checkbox"/> LVS<br><input type="checkbox"/> LCI <input type="checkbox"/> BioRecon                                                                                                                                                                                                                                                                                                                                                          |            |             | <b>WATER QUALITY</b> <table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>0.2</u></td> <td><u>13.3</u></td> <td><u>5.98</u></td> <td><u>9.61</u></td> <td><u>91.8</u></td> <td><u>64</u></td> <td></td> <td><u>0.4</u></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Meter ID: <u>154185</u> TOTAL DEPTH: <u>0.4</u> |             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |            |  | Depth (M) | Temp. (°C) | pH (SU) | D.O. (MG/L) | D.O. Sat (%) | Cond. (UMHO/CM) | Salinity (PPT) | SECCHI (M) | Top: | <u>0.2</u> | <u>13.3</u> | <u>5.98</u> | <u>9.61</u> | <u>91.8</u> | <u>64</u> |  | <u>0.4</u> | Mid: |  |  |  |  |  |  |  |  | Bottom: |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Depth (M)  | Temp. (°C)  | pH (SU)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | D.O. (MG/L) | D.O. Sat (%) | Cond. (UMHO/CM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Salinity (PPT) | SECCHI (M) |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
| Top:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <u>0.2</u> | <u>13.3</u> | <u>5.98</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <u>9.61</u> | <u>91.8</u>  | <u>64</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                | <u>0.4</u> |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
| Mid:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
| Bottom:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
| <b>Woody Debris (Snags)</b> <u>5</u> <u>5</u> <u></u><br><b>Undercut Banks / Roots</b> <u>1</u> <u>5</u> <u></u><br><b>Leaf Packs or Mat</b> <u>2</u> <u>5</u> <u></u><br><b>Aquatic Vegetation</b> <u></u> <u></u> <u></u><br><b>Rock or Shell Rubble</b> <u></u> <u></u> <u></u><br><b>Sand</b> <u></u> <u></u> <u></u><br><b>Mud / Muck / Silt</b> <u>92</u> <u>5</u> <u></u><br><b>Other</b> <u></u> <u></u> <u></u><br><b>Other</b> <u></u> <u></u> <u></u>                                                                                                                  |            |             | <b>Water Odors</b> Normal <input checked="" type="checkbox"/> Petroleum <input type="checkbox"/><br>Sewage <input type="checkbox"/> Chemical <input type="checkbox"/> Other <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |              | <b>Water Surface Oils</b> Normal <input checked="" type="checkbox"/> Sheen <input type="checkbox"/><br>Globbs <input type="checkbox"/> Slick <input type="checkbox"/> Other <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                          |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |             | <b>Water Sample Taken?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><b>Sample Preserved?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Lot Number: <u>BELOW</u> Exp: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |              | <b>Color</b> Tannic <input checked="" type="checkbox"/> Green (Algae) <input type="checkbox"/><br><u>SUB 1.5</u> Clear <input type="checkbox"/> Other (Specify) <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                      |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |             | <b>Algae Sample Taken?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><b>Sample Preserved?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Lot Number: _____ Exp: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |              | <b>Clarity</b> Clear <input checked="" type="checkbox"/> Slightly Turbid <input type="checkbox"/><br>Turbid <input type="checkbox"/> Opaque <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                          |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
| <b>ABUNDANCE</b><br>Not Obs. Rare Common Abundant<br>Periphyton: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Fish: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Aquatic Plants: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Iron/Sulfur Bacteria: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |            |             | <b>System Type:</b> Stream <input checked="" type="checkbox"/> Lake <input type="checkbox"/> Wetland <input type="checkbox"/> Estuary <input type="checkbox"/> Other (Specify) <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |
| <b>SAMPLING TEAM</b><br><u>ADONER, JPATRICKS</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |             | <b>AMBIENT FIELD CONDITIONS / NOTES:</b><br><u>WATER LEVEL 1/2 0.2M HIGHER TO RAIN LAST NIGHT</u><br><input checked="" type="checkbox"/> The antecedent hydrologic conditions have                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |            |  |           |            |         |             |              |                 |                |            |      |            |             |             |             |             |           |  |            |      |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |

SULFURIC

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100% H2SO4

100% H2SO4

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Contains: 1.1 H2SO4  
 Lot No.: SA5129100  
 Expires: 05/09/20  
 See Safety Data Sheet (SDS)

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**DEP-SOP-001/01: Form FD 9000-5**  
**STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**STREAM/RIVER HABITAT ASSESSMENT FIELD SHEET**

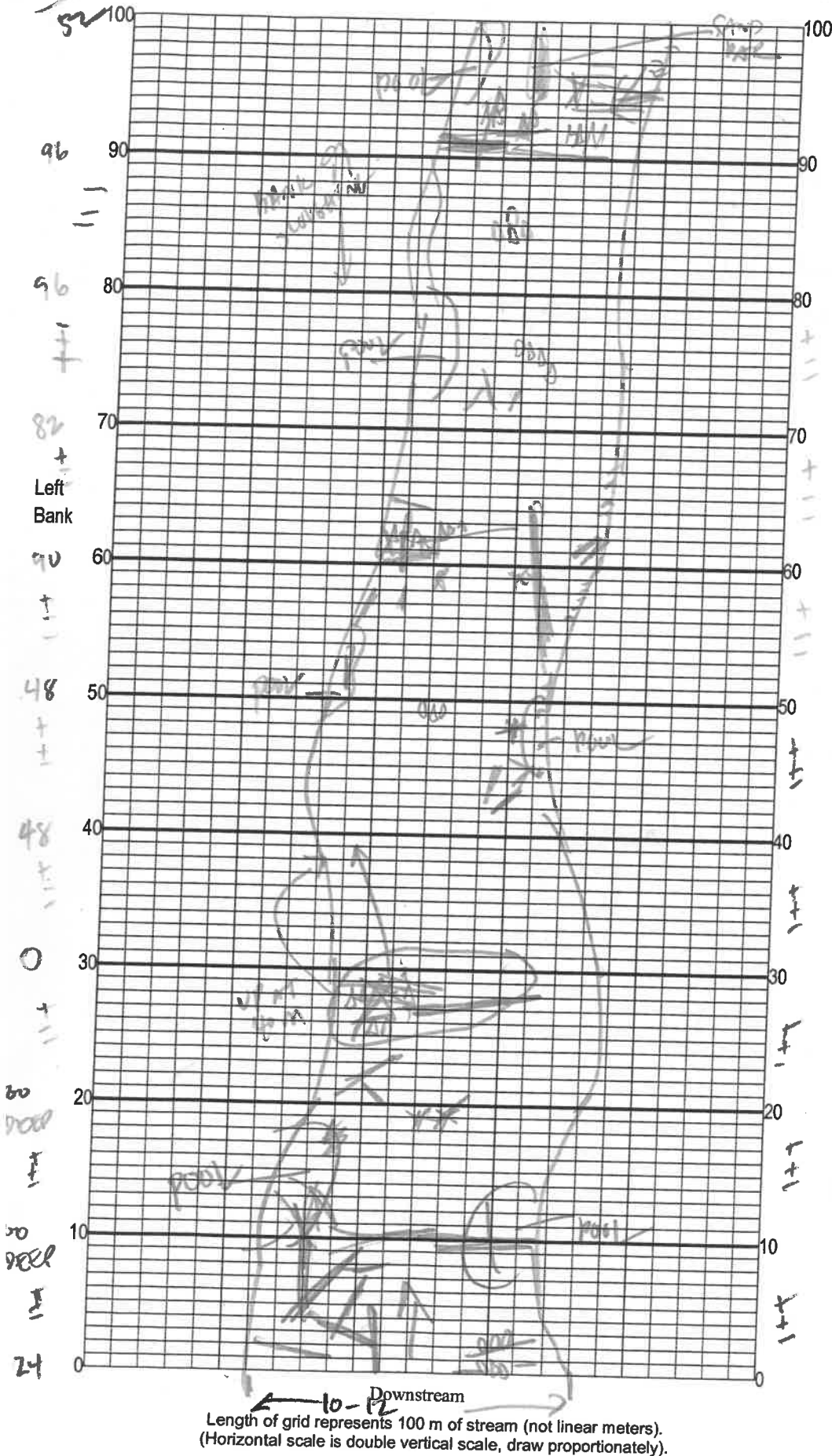
|                               |                          |                                        |                                  |                                                |
|-------------------------------|--------------------------|----------------------------------------|----------------------------------|------------------------------------------------|
| SUBMITTING AGENCY CODE: _____ |                          | STORET STATION NUMBER: <u>22030061</u> | DATE (MM/DD/YY): <u>12-18-19</u> | RECEIVING BODY OF WATER: <u>LAKE MICCOONKE</u> |
| SUBMITTING AGENCY NAME: _____ |                          |                                        |                                  |                                                |
| REMARKS: <u>E10 REP</u>       | COUNTY: <u>JEFFERSON</u> | LOCATION: <u>LAKE CREEK</u>            | FIELD ID/NAME: <u>LAKE REP</u>   |                                                |

| Habitat Parameter                                                                 | Optimal                                                                                                                                                                                                           | Suboptimal                                                                                                                                                     | Marginal                                                                                                                                   | Poor                                                                                                                          |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Primary Habitat Components                                                        | Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]                                                                                      | Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)                                             | Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed                                        | One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered                            |
| Substrate Diversity <u>13</u>                                                     | 20 19 18 17 16                                                                                                                                                                                                    | <u>RAFTS = EM</u><br>15 14 <u>13</u> 12 11                                                                                                                     | 10 9 8 7 6                                                                                                                                 | 5 4 3 2 1                                                                                                                     |
| Substrate Availability <u>8</u>                                                   | Greater than 30% major productive habitat present at site<br>20 19 18 17 16                                                                                                                                       | 16% to 30% major productive habitat, by aerial extent<br>15 14 13 12 11                                                                                        | 6% to 15% major productive habitat<br>10 9 <u>8</u> 7 6                                                                                    | Less than 5% major productive habitat<br>5 4 3 2 1                                                                            |
| Water Velocity <u>15</u>                                                          | Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec<br>≥0.33 0.31 0.29 0.27 >0.25<br>20 19 18 17 <u>16</u>                                                                                             | Max. observed at typical transect: >0.1 to 0.25 m/sec<br>0.25 0.21 0.17 0.13 >0.1<br>15 14 13 12 11                                                            | Max. observed at typical transect: 0.05 to 0.1 m/sec<br>0.1 0.09 0.07 0.06 0.05<br>10 9 8 7 6                                              | Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec<br><0.05 0.04 0.03 0.01 <0.01<br>5 4 3 2 1      |
| Habitat Smothering <u>13</u><br>.....<br>Primary Score <u>50</u>                  | Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae.<br>20 19 18 17 16                                                                                 | Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae.<br>15 14 <u>13</u> 12 11                       | Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth).<br>10 9 8 7 6         | Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation.<br>5 4 3 2 1                            |
| Secondary Habitat Components                                                      | Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.                                                                                                   | Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.                                                   | Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.                        | Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. |
| Artificial Channelization <u>20</u>                                               | <u>20</u> 19 18 17 16                                                                                                                                                                                             | 15 14 13 12 11                                                                                                                                                 | 10 9 8 7 6                                                                                                                                 | 5 4 3 2 1                                                                                                                     |
| Bank Stability                                                                    | Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas.                                                            | Only meets 2 of the 3 requirements for optimal bank stability.                                                                                                 | Only meets 1 of the 3 requirements for optimal bank stability.                                                                             | Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.                   |
| Right Bank <u>5</u><br>Left Bank <u>5</u>                                         | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | <u>5</u> 4                                                                                                                                 | 3 2 1                                                                                                                         |
| Riparian Buffer Zone Width                                                        | Width of vegetation greater than 18 m                                                                                                                                                                             | Width of vegetation >12 to 18m                                                                                                                                 | Width of vegetation 6 to 12 m. human activities close to system                                                                            | Less than 6 m of buffer zone due to intensive human activities                                                                |
| Right Bank <u>10</u><br>Left Bank <u>10</u>                                       | <u>10</u> 9                                                                                                                                                                                                       | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                        | 3 2 1                                                                                                                         |
| Riparian Zone Vegetation Quality                                                  | Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. | >50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. | 25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. | Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).     |
| Right Bank <u>10</u><br>Left Bank <u>10</u><br>.....<br>Secondary Score <u>70</u> | <u>10</u> 9                                                                                                                                                                                                       | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                        | 3 2 1                                                                                                                         |

**TOTAL SCORE**

|                       |                           |                               |
|-----------------------|---------------------------|-------------------------------|
| Date: <u>12-18-19</u> | Analyst: <u>J Jackson</u> | Signature: <u>[Signature]</u> |
|-----------------------|---------------------------|-------------------------------|

# DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: LOYD CREEK

Date: 12.18.19

Sampler: JACKSON

100 m: Latitude \_\_\_\_\_  
Longitude \_\_\_\_\_

0 m: Latitude \_\_\_\_\_  
Longitude \_\_\_\_\_

Substrates: Code key, draw proportionate habitat abundance. %

☒ Snags +++ \_\_\_\_\_

☒ Roots/undercut banks +++ \_\_\_\_\_

☒ Leaf Packs (or mats) +++ \_\_\_\_\_

☐ Aquatic Macrophytes \_\_\_\_\_

☐ \_\_\_\_\_

☐ \_\_\_\_\_

☐ Pools total # observed = \_\_\_\_\_

# range expected = \_\_\_\_\_

Average width 10 m

Average depth 0.4 m

Velocity measured at 70 (0.27) meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering:  
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:  
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:  
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:  
LITTLE BIT OF JAPANESE CLIMBER  
PERN ON  
LEFT BANK

# DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

|                         |  |  |  |  |                       |  |                      |  |                               |                                        |  |
|-------------------------|--|--|--|--|-----------------------|--|----------------------|--|-------------------------------|----------------------------------------|--|
| Site: <u>WOYD CREEK</u> |  |  |  |  | County: <u>JERMAN</u> |  | Date: <u>2/18/19</u> |  | Investigators: <u>Jackson</u> |                                        |  |
| Transect (m)            |  |  |  |  | Transect (m)          |  |                      |  |                               | STORET Station Number: <u>22030061</u> |  |

| Transect (m) | Point<br>1=right<br>9=left | Algal Thickness Rank<br>(N-6, X) | Estimated | Canopy Cover | Transect (m) | Point<br>1=right<br>9=left | Algal Thickness Rank<br>(N-6, X) | Estimated | Canopy Cover |
|--------------|----------------------------|----------------------------------|-----------|--------------|--------------|----------------------------|----------------------------------|-----------|--------------|
| 0            | 1                          | N                                |           |              | 60           | 1                          | N                                |           |              |
|              | 2                          |                                  |           |              |              | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |              | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |              | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 24           |              | 5                          |                                  |           | 90           |
|              | 6                          |                                  |           |              |              | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |              | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |              | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |              | 9                          |                                  |           |              |
| 10           | 1                          |                                  |           |              | 70           | 1                          |                                  |           |              |
|              | 2                          |                                  |           |              |              | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |              | 3                          |                                  |           |              |
|              | 4                          |                                  | X         | TOO          |              | 4                          |                                  |           |              |
|              | 5                          |                                  | X         | X            |              | 5                          |                                  |           | 82           |
|              | 6                          |                                  | X         | DEEP         |              | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |              | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |              | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |              | 9                          |                                  |           |              |
| 20           | 1                          |                                  |           |              | 80           | 1                          |                                  |           |              |
|              | 2                          |                                  |           |              |              | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |              | 3                          |                                  |           |              |
|              | 4                          |                                  | X         | TOO          |              | 4                          |                                  |           |              |
|              | 5                          |                                  | X         | X            |              | 5                          |                                  |           | 96           |
|              | 6                          |                                  | X         | DEEP         |              | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |              | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |              | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |              | 9                          |                                  |           |              |
| 30           | 1                          |                                  |           |              | 90           | 1                          |                                  |           |              |
|              | 2                          |                                  |           |              |              | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |              | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |              | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 0            |              | 5                          |                                  |           | 96           |
|              | 6                          |                                  |           |              |              | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |              | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |              | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |              | 9                          |                                  |           |              |
| 40           | 1                          |                                  |           |              | 100          | 1                          |                                  |           |              |
|              | 2                          |                                  |           |              |              | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |              | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |              | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 48           |              | 5                          |                                  |           | 52           |
|              | 6                          |                                  |           |              |              | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |              | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |              | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |              | 9                          |                                  |           |              |
| 50           | 1                          |                                  |           |              |              | 1                          |                                  |           |              |
|              | 2                          |                                  |           |              |              | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |              | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |              | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 48           |              | 5                          |                                  |           |              |
|              | 6                          |                                  |           |              |              | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |              | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |              | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |              | 9                          |                                  |           |              |

|              |     |
|--------------|-----|
| Secchi depth | 0.4 |
| Estimated?   | ✓   |

V03

|                       |    |
|-----------------------|----|
| # points ranked 4-6   | 0  |
| total points assessed | 93 |
| % points ranked 4-6   | 0  |

|                                                      |     |
|------------------------------------------------------|-----|
| Check accompanying data collected at same site/date. |     |
| Algal mat sample                                     |     |
| Linear Veg Survey                                    | N/A |
| Habitat Assessment                                   | ✓   |
| SCI/Biorecon                                         | ✓   |
| Water sample                                         | ✓   |
| RQ- 2019-10-07-61                                    |     |

| Algal Thickness Rank |                                         |
|----------------------|-----------------------------------------|
| N                    | rough, no algae, slimy, algae up to 1mm |
| 3                    | >1mm - 6mm                              |
| 4                    | >6mm - 20mm                             |
| 5                    | >20mm - 10 cm                           |
| 6                    | >10 cm                                  |

Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached.

Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.

Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.

Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

Reference Stream Sampling

## Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: BSSP

Requester: Sarah Panek

Field Report Prepared By:

J J Ackerson

Project ID: SCIREF

Collected By: FDEP

Sampling Agency:

FDEP/ACER

|             |                             |                              |                                          |                                 |                                          |                |              |         |                                        |                           |                          |                 |
|-------------|-----------------------------|------------------------------|------------------------------------------|---------------------------------|------------------------------------------|----------------|--------------|---------|----------------------------------------|---------------------------|--------------------------|-----------------|
| Location    | WEAUVILLE CREEK             |                              | <input type="checkbox"/> Comp            | Collection (comp begin or grab) | <input checked="" type="checkbox"/> Grab | Date           | 12-18-19     | Time    | 1030                                   | Eastern                   | Composite end            | Bottle Group(s) |
| Field ID    | WEAUVILLE CREEK             |                              | <input checked="" type="checkbox"/> Grab | Date                            | 12-18-19                                 | Time           | 1030         | Central | Date                                   |                           | mg/L Total Res. Chlorine | (See pg 2)      |
| WINSTORET # | 22040022                    |                              | Temp (C)                                 | 12.9                            | pH                                       | 5.80           | Sample Depth | 0.2     | <input checked="" type="checkbox"/> ft | Sp. Conductance (umho/cm) | 66.6                     | AB              |
| Latitude    | <input type="checkbox"/> dd | <input type="checkbox"/> dms | Longitude                                | <input type="checkbox"/> dd     | <input type="checkbox"/> dms             | Salinity (ppt) |              |         |                                        |                           |                          |                 |
| Location    | WYD CREEK                   |                              | <input type="checkbox"/> Comp            | Collection (comp begin or grab) | <input checked="" type="checkbox"/> Grab | Date           | 12-18-19     | Time    | 1330                                   | Eastern                   | Composite end            | Bottle Group(s) |
| Field ID    | WYD CREEK                   |                              | <input checked="" type="checkbox"/> Grab | Date                            | 12-18-19                                 | Time           | 1330         | Central | Date                                   |                           | mg/L Total Res. Chlorine | AB              |
| WINSTORET # | 22030061                    |                              | Temp (C)                                 | 13.3                            | pH                                       | 5.98           | Sample Depth | 0.2     | <input checked="" type="checkbox"/> ft | Sp. Conductance (umho/cm) | 64                       | AB              |
| Latitude    | <input type="checkbox"/> dd | <input type="checkbox"/> dms | Longitude                                | <input type="checkbox"/> dd     | <input type="checkbox"/> dms             | Salinity (ppt) |              |         |                                        |                           |                          |                 |
| Location    |                             |                              | <input type="checkbox"/> Comp            | Collection (comp begin or grab) | <input type="checkbox"/> Grab            | Date           |              | Time    |                                        | Eastern                   | Composite end            | Bottle Group(s) |
| Field ID    |                             |                              | <input type="checkbox"/> Grab            | Date                            |                                          | Time           |              | Central | Date                                   |                           | mg/L Total Res. Chlorine |                 |
| WINSTORET # |                             |                              | Temp (C)                                 |                                 | pH                                       |                | Sample Depth |         | <input type="checkbox"/> ft            | Sp. Conductance (umho/cm) |                          |                 |
| Latitude    | <input type="checkbox"/> dd | <input type="checkbox"/> dms | Longitude                                | <input type="checkbox"/> dd     | <input type="checkbox"/> dms             | Salinity (ppt) |              |         |                                        |                           |                          |                 |
| Location    |                             |                              | <input type="checkbox"/> Comp            | Collection (comp begin or grab) | <input type="checkbox"/> Grab            | Date           |              | Time    |                                        | Eastern                   | Composite end            | Bottle Group(s) |
| Field ID    |                             |                              | <input type="checkbox"/> Grab            | Date                            |                                          | Time           |              | Central | Date                                   |                           | mg/L Total Res. Chlorine |                 |
| WINSTORET # |                             |                              | Temp (C)                                 |                                 | pH                                       |                | Sample Depth |         | <input type="checkbox"/> ft            | Sp. Conductance (umho/cm) |                          |                 |
| Latitude    | <input type="checkbox"/> dd | <input type="checkbox"/> dms | Longitude                                | <input type="checkbox"/> dd     | <input type="checkbox"/> dms             | Salinity (ppt) |              |         |                                        |                           |                          |                 |
| Location    |                             |                              | <input type="checkbox"/> Comp            | Collection (comp begin or grab) | <input type="checkbox"/> Grab            | Date           |              | Time    |                                        | Eastern                   | Composite end            | Bottle Group(s) |
| Field ID    |                             |                              | <input type="checkbox"/> Grab            | Date                            |                                          | Time           |              | Central | Date                                   |                           | mg/L Total Res. Chlorine |                 |
| WINSTORET # |                             |                              | Temp (C)                                 |                                 | pH                                       |                | Sample Depth |         | <input type="checkbox"/> ft            | Sp. Conductance (umho/cm) |                          |                 |
| Latitude    | <input type="checkbox"/> dd | <input type="checkbox"/> dms | Longitude                                | <input type="checkbox"/> dd     | <input type="checkbox"/> dms             | Salinity (ppt) |              |         |                                        |                           |                          |                 |
| Location    |                             |                              | <input type="checkbox"/> Comp            | Collection (comp begin or grab) | <input type="checkbox"/> Grab            | Date           |              | Time    |                                        | Eastern                   | Composite end            | Bottle Group(s) |
| Field ID    |                             |                              | <input type="checkbox"/> Grab            | Date                            |                                          | Time           |              | Central | Date                                   |                           | mg/L Total Res. Chlorine |                 |
| WINSTORET # |                             |                              | Temp (C)                                 |                                 | pH                                       |                | Sample Depth |         | <input type="checkbox"/> ft            | Sp. Conductance (umho/cm) |                          |                 |
| Latitude    | <input type="checkbox"/> dd | <input type="checkbox"/> dms | Longitude                                | <input type="checkbox"/> dd     | <input type="checkbox"/> dms             | Salinity (ppt) |              |         |                                        |                           |                          |                 |

Relinquished By:

JACKSON

Date/Time

12-18-19

Shipping Method

Hand

Number of Coolers Shipped:

Received By:

Ian McCoy

Date/Time

12/18/19 4:13pm